Page 1 of 6

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/086,082

DATE: 09/09/2002 TIME: 15:38:19

Input Set : N:\Crf3\RULE60\10086082.raw

```
Output Set: N:\CRF3\09092002\J086082.raw
                                                    ENTERED
1 <110> APPLICANT: Brieden, Walter
        Naughton, Andrew
2
        Robins, Karen
3
         Shaw, Nicholas
4
 5
         Tinschert, Andreas
         Zimmermann, Thomas
  <120> TITLE OF INVENTION: METHOD OF PREPARING (S)-OR (R)
7
         -3,3,3-TRIFLUORO-2-HYDROXY-2-METHYLPROPIONIC ACID
8
9 <130> FILE REFERENCE: 32213
10 <140> CURRENT APPLICATION NUMBER: 10/086,082
11 <141> CURRENT FILING DATE: 2002-02-28
13 <150> PRIOR APPLICATION NUMBER: US/09/214,679
14 <151> PRIOR FILING DATE: 1999-12-30
17 <160> NUMBER OF SEQ ID NOS: 14
18 <170> SOFTWARE: FastSEQ for Windows Version 3.0
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21 <211> LENGTH: 1442
22 <212> TYPE: DNA
23 <213> ORGANISM: Klebsiella oxytoca
24 <400> SEQUENCE: 1
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25
          ccgcacagcg ctgtgcggta atggataaag gcctggttgt agaaacgctg acccaacaac
26
          agetetetga tgatetttta atgegtegte atetggetet gtaactaaac getataaatt
27
          acgtggagaa taacatatga aatggttgga agaatccatt atggccaaac gcggtgttgg
28
          tgccgggcgt aaaccggtaa cgcatcacct gacggaagaa atgcaaaaag agtttcatta
29
          caccattggc ccttattcca cacccgtcct gaccatcgaa cccggtgacc ggattattgt
30
          cgacactcga gatgcttttg aaggtgctat caattcggaa caggatattc cgagccagtt
31
          gctaaaaatg ccctttctca acccacaaaa cggaccgatc atggtcaatg gcgcggagaa
32
          aggtgatgtg ctcgctgtct atatcgaatc catgttgccc cgcggcgttg atccctacgg
33
          catctgcgcc atgattccgc attttggcgg actgaccggg accgacctga cggccatgct
34
          caatgatccg ctgccagaaa aggtgcgcat gattaaactc gacagtgaaa aggtctactg
35
          gagcaaacgc catacgcttc cctataaacc ccatattggc accttgagcg tatcgccaga
36
          aattgactca atcaattcac tgacgccaga caatcacggc gggaatatgg atgtgccgga
37
          tataggacca gggagtatta cctatctgcc ggtacgtgcg cctggaggcc gcctgtttat
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tggtgatgcc catgcttgtc agggtgatgg tgagatttgc gggaccgcag tagagtttgc

ctcaatcacc accatcaaag tcgatttgat caagaactgg cagctttcct ggccacgaat

ggagaatgcc gaaaatatta tgagtattgg cagtgcacgt ccgctggagg atgcgacgcg

aattgcatat cgcgacttaa tttactggct ggtagaagac tttggcttcg aacaatggga

tgcctacatg cttctgagtc aatgcggcaa agtgcggctg ggcaacatgg tcgaccccaa

atacaccgtt ggcgcgatgc tgaacaaaaa cctgttagtt tagtaggaat aactaaccgg

tgaacattac ccggatgtag atcggggtaa tgtgtaagtt caaacaatcg ctattttaa

cagctaaagc aggtgcatat ggggccagat acacccatca atattggttt actttactcc

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120

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300

360

420

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540

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1080

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1440

RAW SEQUENCE LISTING DATE: 09/09/2002 PATENT APPLICATION: US/10/086,082 TIME: 15:38:19

gccgaaatta atcaaaatgg cggcatcaac ggcagaccac tcaatgcaat tcatttggat

Input Set : N:\Crf3\RULE60\10086082.raw
Output Set: N:\CRF3\09092002\J086082.raw

40		_	yaaa	LLa	acca	aaat	gg C	ggca	LCaa	c yy	caya	CCaC	LCa	atyc	aac	LCaL	ccyyac	1440
49		CC																1442
51	<210>	SEQ ID NO: 2																
52	<211>	LENGTH: 328																
53	<212>	TYPE: PRT																
54	<213>	ORGA	NISM	: K1	ebsi	ella	oxy	toca										
	<400>						2											
56	11007				T.e.u	Glu	Glu	Ser	Tlo	Met	Δla	T.ve	Δτα	G1v	Va 1	Glv	Δla	
57		1	цуз	115	БСи	5	Olu	JCI	110	rice	10	цуз	пту	GLY	VUI	15	AIG	
		_	3	T	Dwo	-	mb	17	77.5 ~	T		G3.	a 1	1/	01		a 1	
58		GTĀ	Arg	гàг		Val	THE	HIS	HIS		Thr	Giu	GIU	met		ьys	GIU	
59		_,	•	_	20			_	_	25		_	_	_	30			
60		Phe	His	_	Thr	Ile	GLY	Pro	-	Ser	Thr	Pro	Val		Thr	IIe	Glu	
61				35					40					45				
62		Pro	Gly	Asp	Arg	Ile	Ile	Val	Asp	Thr	Arg	Asp	Ala	Phe	Glu	Gly	Ala	
63			50					55					60					
64		Ile	Asn	Ser	Glu	Gln	Asp	Ile	Pro	Ser	Gln	Leu	Leu	Lys	Met	Pro	Phe	
65		65					70					75					80	
66		Leu	Asn	Pro	Gln	Asn	Gly	Pro	Ile	Met	Val	Asn	Gly	Ala	Glu	Lys	Gly	
67						85	-				90		-			95	•	
68	,	Asp	Val	Leu	Ala	Val	Tvr	Tle	Glu	Ser		Len	Pro	Ara	Glv		Asp	
69					100		-1-		014	105		Lou		**** 3	110	, ~ _		
70		Dro	Фът	Clv		Cys	λΙэ	Mot	Tlo		Uic	Dho	C111	C1**		mh x	C1	
71		FIO	TYL	115		Cys	Ата	Mec	120	PIO	птэ	Pile	СТУ	125	цец	1111	GIÀ	
		m1	3			21-	34-4	т		3	D	T	D		T	**- 1	3	
72		THE		Leu	THE	Ala	мес		ASI	Asp	Pro	Leu		GIU	гàг	vaı	Arg	
73			130	_	_	_	_	135	_	-	_	_	140					
74			Ile	Lys	Leu	Asp		Glu	Lys	Val	Tyr		Ser	Lys	Arg	His		
75		145					150					155					160	
76		Leu	Pro	Tyr	Lys	Pro	His	Ile	Gly	Thr	Leu	Ser	Val	Ser	Pro	Glu	Ile	
77						165					170					175		
78		Asp	Ser	Ile	Asn	Ser	Leu	\mathtt{Thr}	Pro	Asp	Asn	His	Gly	Gly	Asn	Met	Asp	
79					180					185					190			
80		Val	Pro	Asp	Ile	Gly	Pro	Gly	Ser	Ile	Thr	Tyr	Pro	Leu	Val	Arq	Ala	
81				195				_	200			_		205		_		
82		Pro	Glv	Glv	Arg	Leu	Phe	Ile	Glv	Asp	Ala	His	Ala	Cvs	Gln	Glv	Asp	
83			210		2			215	1	L			220	-1-		1	E	
84		Glv		Tle	Cvs	Gly	Thr		Val	Glu	Phe	Δla		Tle	Thr	Thr	Tle	
85		225	O.L.u		0,0	U-1	230		, 41	Olu	1	235	DCI	110	1111		240	
86			v-1	λαn	Ton	Ile		Aan	m~n	Cln	T 011		m~~	Dwo	7 ~~	Mot		
87		цуз	Val	нар	Бец	245	цуз	ASII	тър	GIII		ser	тър	PIU	AIG		GIU	
		3	71.	~1	7		14-b	O	T1.	a1	250	.1-		D	.	255	•	
88		ASII	Ата	GIU		Ile											Asp	
89			1														_	
90		Ala	Thr		Ile	Ala	Tyr	Arg		Leu	Ile	Tyr	Trp		Val	Glu	Asp	
91				275					280					285				
92		Phe	Gly	Phe	Glu	Gln	Trp	Asp	Ala	Tyr	Met	Leu	Leu	Ser	Gln	Cys	Gly	
93			290					295					300					
94		Lys	Val	Arg	Leu	Gly	Asn	Met	Val	Asp	Pro	Lys	Tyr	Thr	Val	Gly	Ala	
95		305		_		_	310			-		315	_			-	320	
96			Leu	Asn	Lys	Asn	Leu	Leu	Val									
97				·	•	325			. —									

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RAW SEQUENCE LISTING DATE: 09/09/2002 PATENT APPLICATION: US/10/086,082 TIME: 15:38:19

Input Set : N:\Crf3\RULE60\10086082.raw
Output Set: N:\CRF3\09092002\J086082.raw

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99 <210> SEQ ID NO: 3
100 <211> LENGTH: 20
101 <212> TYPE: PRT
102 <213> ORGANISM: Klebsiella oxytoca
103 <400> SEQUENCE: 3
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104
                                                10
105
           1
                            5
106
           Ser Arg Lys Pro
107
                       20
109 <210> SEQ ID NO: 4
110 <211> LENGTH: 5
111 <212> TYPE: PRT
112 <213> ORGANISM: Klebsiella oxytoca
113 <400> SEQUENCE: 4
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115
117 <210> SEQ ID NO: 5
118 <211> LENGTH: 13
119 <212> TYPE: PRT
120 <213> ORGANISM: Klebsiella oxytoca
121 <400> SEQUENCE: 5
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123
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125 <210> SEQ ID NO: 6
126 <211> LENGTH: 9
127 <212> TYPE: PRT
128 <213> ORGANISM: Klebsiella oxytoca
129 <400> SEQUENCE: 6
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131
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133 <210> SEQ ID NO: 7
134 <211> LENGTH: 14
135 <212> TYPE: PRT
136 <213> ORGANISM: Klebsiella oxytoca
137 <400> SEQUENCE: 7
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138
139
            1
141 <210> SEQ ID NO: 8
142 <211> LENGTH: 9
143 <212> TYPE: PRT
144 <213> ORGANISM: Klebsiella oxytoca
145 <400> SEQUENCE: 8
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146
147
149 <210> SEQ ID NO: 9
150 <211> LENGTH: 18
151 <212> TYPE: PRT
152 <213> ORGANISM: Klebsiella oxytoca
153 <400> SEQUENCE: 9
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Input Set : N:\Crf3\RULE60\10086082.raw
Output Set: N:\CRF3\09092002\J086082.raw

```
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154
                                                10
155
            1
           Glu Lys
156
158 <210> SEQ ID NO: 10
159 <211> LENGTH: 19
160 <212> TYPE: PRT
161 <213> ORGANISM: Klebsiella oxytoca
162 <400> SEQUENCE: 10
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163
                            5
                                                10
           1
164
165
          Leu Leu Lys
167 <210> SEQ ID NO: 11
168 <211> LENGTH: 21
169 <212> TYPE: PRT
170 <213> ORGANISM: Klebsiella oxytoca
171 <400> SEQUENCE: 11
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                                                10
173
           1
174
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                       20
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178 <211> LENGTH: 23
179 <212> TYPE: PRT
180 <213> ORGANISM: Klebsiella oxytoca
181 <400> SEQUENCE: 12
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182
                                                10
183
                            5
           Gly Thr Ala Val Glu Phe Ala
184
                       20
185
187 <210> SEQ ID NO: 13
188 <211> LENGTH: 14
189 <212> TYPE: PRT
190 <213> ORGANISM: Klebsiella oxytoca
191 <400> SEQUENCE: 13
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                            5
195 <210> SEQ ID NO: 14
196 <211> LENGTH: 33
197 <212> TYPE: PRT
198 <213> ORGANISM: Klebsiella oxytoca
199 <400> SEQUENCE: 14
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200
                                                10
201
           Leu Thr Gly Thr Asp Leu Thr Ala Met Leu Asn Asp Gln Leu Gln Pro
202
203
                                            25
                                                                 30
204
           Lys
```

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/086,082

DATE: 09/09/2002

TIME: 15:38:20

Input Set : N:\Crf3\RULE60\10086082.raw
Output Set: N:\CRF3\09092002\J086082.raw